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10/754,015

01/08/2004

Harry W. Parker

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06/09/2006

ARMSTRONG WORLD INDUSTRIES, INC.
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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/754,015 | PARKER ET AL. | |
| | Examiner | Art Unit | |
| | Robert Sellers | 1712 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,9-18,21-27 and 71-96 is/are pending in the application.
- 4a) Of the above claim(s) 75,82,86 and 92 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-6,9-18,21-27, 71-73 and 93-96 is/are allowed.
- 6) ☒ Claim(s) 74,77,78,80,81,83-85 and 87-91 is/are rejected.
- 7) ☒ Claim(s) 76 and 79 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 75, 82, 86 and 92 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to the nonelected species of 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane as the free radical generating catalyst, there being no allowable generic or linking claim. The election of methyl ethyl ketone peroxide was made **without** traverse in the reply filed on December 16, 2005.
2. The species of free radical generating catalyst of 2,4,4-trimethyl-2-hydroperoxide is not accurately designated in the specification on page 11, paragraph 38, line 6 as well as in claim 6, line 5, claims 23, 72, 81 and 85, line 4 and claim 74, line 9. The inclusion of the letter "l" at the end of the "trimethy" moiety and the insertion of the hyphen between "2" and "hydroperoxide" would more concisely denote the catalyst.
3. The cancellation of claim 2 overcomes the 35 U.S.C. 112, second paragraph, rejection.

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4. None of the applied prior art of Japanese Patent No. 5-132616, CAPLUS accession no. 2000:442219 for Romanian Patent No. 111,782; CAPLUS accession no. 1987:34138 for the Lavrega article, Soviet Union Patent No. 1,479,474; German Patent No. 1,804,364; CAPLUS accession no. 1989:595992 for Cuadrado et al., May Patent No. 2,921,040; CAPLUS accession no. 1961:134458 for Czech Patent No. 90264, Japanese Patent No. 55-129416 and Graham et al. Patent No. 3,510,489 recites either the epoxidized vegetable oil and/or the polycarboxylic acid crosslinker of claims 1, 3-6, 9-18, 21-27 and 93-96 which are new limitations to independent claim 1 in the amendment filed June 2, 2006.

5. None of the references except for Graham et al. Patent No. 3,510,489 discloses the free radical generating catalyst required in new claims 74-77. The crosslinker confined to a polycarboxylic acid and/or a polyacrylate in new claims 78-82, and a polyacrylate alone in new claims 83-86 are not set forth in any of the applied references except for Graham et al.

Claims 76 and 79 are objected to as being dependent upon rejected base claims 74 and 78, respectively, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The crosslinker of independent claims 74 and 78 if limited to a polycarboxylic acid crosslinker would preclude the 1,3-butylene dimethacrylate or trimethylolpropane trimethacrylate of Graham et al. (col. 3, lines 15-16).

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 87-91 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

6. Nowhere in the specification is there any disclosure of the use of the composition as a binder. The portions of the specification discussing the ultimate utility of the composition are page 1, paragraph 1, line 4 ("floor coverings, including resilient floor materials") and page 24, paragraph 90, lines 1-3 ("surface coverings and/or surface covering components, such as floor and wall covering products").

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 87 and 90 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 5-132616.

7. The claimed binder consisting essentially of a ricinoleic acid component such as castor oil, an epoxidized vegetable oil such as the epoxidized soybean oil of claim 90 and a crosslinker embraces the blend reported in the Japanese patent of castor oil, epoxidized soybean oil and a polyoxyalkylene polymer with reactive silicon groups participating in a hardening reaction (translation, page 1, paragraph 5).

8. The claimed blend characterized as a binder merely indicates the ultimate intended utility and is not a critical limitation. The formulation of the Japanese patent useful as a sealing material exhibits binding aspects upon application to a surface to be sealed.

Claims 74, 77, 78, 80, 81, 83-85, 87, 88, 90 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. Patent No. 3,510,489.

9. The crosslinker of independent claim 74 is open to species other than one selected from the group consisting of sebacic acid, citric acid and combinations thereof denoted in claim 76, such as the 1,3-butylene dimethacrylate or trimethylolpropane trimethacrylate set forth in column 3, lines 15-16 of the patent. The 1,3-butylene dimethacrylate or trimethylolpropane trimethacrylate fall within the polyacrylate crosslinker of independent claims 78 and 83.

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10. The blend of claims 87, 88, 90 and 91 characterized as a binder consisting essentially of the components. merely indicates the ultimate intended utility and is not a critical limitation. The dispersion of Graham et al. contains a binder resin which integrates the magnetic material within the molded web, thereby falling within the claimed binder and not materially affecting the basic and novel characteristics of the claimed mixture.

The arguments filed June 2, 2006 have been considered but are unpersuasive.

11. Graham et al. (col. 3, lines 25-37) teaches the addition of "plasticizers, wetting agents and stabilizers, to maintain good dispersion of the magnetic material prior to curing." Castor oil is used as a wetting agent in Examples II and III (cols. 7 and 8). Epoxidized soybean oil is employed in Mixture D (col. 5, lines 31-32) and is designated as a heat stabilizer (col. 5, lines 56-58).

12. It would have been obvious to combine the castor oil wetting agent and epoxidized soybean oil heat stabilizer in the dispersion with the polymerizable monomer such as the 1,3-butylene dimethacrylate or trimethylolpropane trimethacrylate in order to enhance the dispersibility and stabilize the dispersion during heating.

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The amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers
Primary Examiner
Art Unit 1712